

PANOV, V. I.

YUSHCHENKO, Nikolay Romanovich; KULAYEV, Konstantin, Vladimirovich;  
KRIVENKO, Nikita Akimovich; PANOV, V. I., inzhener, redaktor;  
YUDSON, D. M. tekhnicheskii redaktor.

[Over-all technology of shunting stations; practice of the  
Nizhnedneprovsk Uzel station on the Stalinoline] Kompleksnaia  
tekhnologiya sortirovochnoi stantsii; opyt stantsii Nizhne-  
dneprovsk Uzel Stalinskoi dorogi. Moskva, Gos.transp.zhel-dor  
izd-vo, 1955. 45 p. (MLRA 8:11)

(Railroads--Making up trains)

*PANOV, V.I.*

PANOV, V.I., inzhener.

"Feed-water supply of shore-line electric power stations." H.A.  
Malishevskii. Reviewed by V.I.Panov. Elek. sta. 26 no.1:62-64  
Ja '55. (MLRA 8:3)  
(Electric power plants)

LOGINOV, Nikolay Grigor'yevich; PANDOV, V.I., redaktor; KHITROV, P.A.,  
tekhnicheskii redaktor.

[Manual on safety measures for train make-up foremen and couplers]  
Pamiatka po tekhnike bezopasnosti sostaviteliu poezdov i stsepshchi-  
ku vagonov. Izd.3-e Moskva, Gos.transp. shel-dor.isd-vo, 1956. 79 p.  
(Railroads--Safety measures) (MIRA 9:6)

SAMSONOV, Aleksey Vasil'yevich; PANOV, V.I., redaktor; KHITROV, P.A.,  
tekhnicheskii redaktor.

[Manual on safety measures for chief and assistant train  
conductors] Pamiatka po tekhnike bezopasnosti glavnomu i  
starshemu konduktoram. Izd. 3-e. Moskva, Gos.transp shel-  
dor. izd-vo, 1956. 94 p. (MIRA 9:6)  
(Railroads--Safety measures)

RIDEL', Eduard Ivanovich; PANOV, V.I., inzhener, redaktor; YUDZON, D.M.,  
tekhnicheskii redaktor.

[Mechanizing the shifting of loads in closed storerooms with the  
aid of fork lift trucks; work practice of the Kiev and Odessa  
freight stations, and Moscow freight station in Leningrad] Mekha-  
nizatsiia pererabotki gruzov v zakrytykh skladakh elektropogruz-  
chikami; opyt stantsii Leningrad-tovarnyi Moskovskii, Kiev-tovarnyi,  
Odessa-tovarnaia. Moskva, Gos.transp.zhel-dor.izd-vo, 1956. 98 p.  
(Fork lift trucks) (Railroads--Freight) (MIRA 9:6)

SUKHOVARDOV, Nikolay Aleksandrovich; ~~PANOV, V.I.~~ redaktor; BOBROVA, Ye.N.,  
tekhnicheskiiy redaktor

[Manual for passenger car conductors and train officials] Spravochnik  
provednikov passazhirsikh vagonov i nachal'nikov poyezdov. Moskva,  
Gos. transp. zhel-dor. izd-vo, 1956. 266 p. (MLRA 9:12)  
(Railroads--Management)

PANOV, V. I.

SERGIYEV, S.A.; PANOV, V.I., redaktor; BOIKOVA, Ye.N., tekhnicheskii redaktor.

[Compact loading of cars and containers] Uplotnennaya zagruzka vagonov i konteynerov, Moskva, Gos.transp.shel-dor.isd-vo, 1957. (MLRA 10:6)  
85 p.

1. Russia (1923- U.S.S.R.) Glavnoye gruzovoye upravleniye.  
(Loading and unloading)  
(Railroads—Freight cars)

PANOV, V.I.

NIKOLAYEV, A.F., kandidat tekhnicheskikh nauk; PANOV, V.I., inzhener.

Supplementary planetary gear sets used in the S-80 tractors.  
Stroi.i dor.mashinostr. 2 no.7:19-20 Ji '57. (MIRA 10:7)  
(Tractors) (Automobiles--Transmission devices)



BELOUSOV, I.I.; KHACHATUROV, T.S., otvetstvennyy red.; PAINOV, V.I., red.;  
KHITROV, P.A., tekhn.red.

[Interdistrict communications and transportation of grain] Mezhrayonnye aviatsi i perevozki khlebnnykh gruzov. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 62 p. (MIRA 11:5)

1. Direktor Instituta kompleknykh transportnykh problem AN SSSR,  
chlen-korrespondent AN SSSR (for Khachaturov)  
(Grain--Transportation)

*PAHOV, V.I.*  
BARIHOV, N.N., kand.ekon.nauk, red.; PAHOV, V.I., red.; BOBROVA, Ye.N.,  
tekh.n.red.

[Combined railroad and water transportation] Smeshannye zheleznno-  
dorozhno-vodnye perevozki. Pod obshchey red. N.N.Barkova. Moskva,  
1958. 166 p. (MIRA 11:4)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznno-  
dorozhnogo transporta.  
(Railroads--Freight) (Shipping)

IL'IN, Konstantin Pavlovich; PANOVA, V.I., red.; BOBROVA, Ye.N., tekhn.red.

[Railroad scales and weighing] Vesovoe khoziasstvo zheleznykh  
dorog. Izd. 2-e, ispr. i dop. Moskva, Gos. transp.shel-dor.  
ind-vo, 1958. 231 p. (MIRA 11:4)  
(Weighing machines)  
(Railroads--Equipment and supplies)

GORDIN, I.M.; MURATKHAN, V.P.; PANOV, V.K.; KRAVTSOV, G.Ya., red.;  
PARAKHINA, N.L., tekhn. red.; PROKOF'YEVA, L.N., tekhn. red.

[Organization and performance of land improvement construction work] Organizatsiia i proizvodstvo meliorativno-stroitel'nykh rabot. Moskva, Sel'khozizdat, 1963. 327 p.  
(MIRA 17:3)

PANOV, V.K., kand.sel'skokhozyaystvennykh nauk

Land improvement methods for the tillage of excessively wet soils.  
Zemledelie 25 no.7:20-30 JI '63. (MIRA 16:9)

1. Severnyy nauchno-issledovatel'skiy institut gidrotekhniki i  
melioratsii.

(Leningrad Province—Drainage)  
(Leningrad Province—Tillage)

PANOV, V.K., kand.sel'skokhozyaystvennykh nauk

Studies on the economic effectiveness of drainage in heavy soils.  
(MIRA 13:6)  
Trudy SevNIIGIM no.14:53-89 '58.  
(Drainage--Economic aspects)

PANOV, V.K., kand. sel'skokhoz. nauk

Cost of agricultural soil improvement measures and their effectiveness.

Trudy SevNIIGIM no.12:99-116 '57.

(MIRA 12:10)

(Drainage)

PANOV, Vl., inzh.

Electric modeling of mine ventilation. Possibilities of modeling  
several sorts of curves. *Godishnik Min geol inst* 7 no.1:133-152  
'60/'61.



PANOV, V.I., inzh.

Dimensioning of induction coils for the measurement of slipping in asynchronous machines. Godishnik Min geol inst 8:123-128 '61-'62 [poul. '63].

GOLUBKOV, A.I.; PANOV, V.M.

Creep delay time in steel under dynamic loading. Zav.lab. 25 no.2:209  
' 59. (MIRA 12:3)

(Steel---Testing) (Creep of metals)

SOV/32-25-2-39/78

18(3)

AUTHORS:

Golubkov, A. I., Panov, V. M.

TITLE:

On the Delay of the Flowing Capacity of Steel With Dynamic Stressing (O vremeni zaderzhki tekuchesti stali pri dinamic'es-kom nagruzhении)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2,  
p 209 (USSR)

ABSTRACT:

Dynamic stressing of soft steel results in a raising of the flow limit (FL) in dependence on the rate of deformation. In the present case steel St.3 was investigated by dynamic stressing with different degrees of overloading, and the time was determined during which the metal is able to maintain the (FL) with regard to the static (FL), i.e. the delay of flowing capacity (vremya zaderzhki tekuchesti) (DFC). The tests were carried out at 20° with a pneumatic plant and samples of a diameter D= 6 mm and an effective length of 5 D. The energy consumed was measured by means of a setup dynamometer - amplifier - oscillograph. The deformation was determined by means of resistor cells glued to the samples, a bridge connection, and the oscillograph MPO-2 .

Card 1/2

On the Delay of the Flowing Capacity of Steel With  
Dynamic Stressing

SOV/32-25-2-39/78

The (DFC) was determined directly from the oscillogram (Fig) (Table), and it was found that, basically, the (DFC) depends, at stable temperatures, on the degree of over-stressing, and hardly on the rate of deformation. In the present case values ranging from 0.002 to 0.20 seconds were found for the (DFC). There are 1 figure and 1 table.

Card 2/2

*PANOV, V. M.*

PANOV, V. M. inzh.

Practices of inclined shaft sinking at the "Krupekaia-Glubokaia"  
mine. Shakht.stroi. no.10:24-25 0 '57. (MIRA 10:12)  
(Shaft sinking)

L 8371-65 ENT(1)/EEG(1)-2/EEG-2 AFETR/BAEM(t)

ACCESSION NR: AR4044024

8/0058/65/000/011/A029/A029

SOURCE: Ref. zh. Fizika, Abs. 11A298

AUTHOR: Chernyayev, V. B.; Kadshevich, V. I.; Panov, V. N.

TITLE: Multi-stable transistorized circuits

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektronike, 1961. M., Gosatomizdat, 1962, 156-160

TOPIC TAGS: circuit, transistorized circuit, multistable circuit

TRANSLATION: Examines transistorized circuits with many stable states. To create such a device with  $n$  stable states there are required  $n$  triodes. The operational principle of the circuit is similar to that of vacuum tube circuits.

Card 1/2

D 8371-65

ACCESSION NR: AR4044024

more reliable and simpler to align than a circuit with one conducting triode. In practice, circuits with  $n = 3, 4,$  and  $5$  were set up and shown to operate. The resolving time of the circuit using P-14 triodes was no worse than  $5-8$  microseconds. It was shown that such five-stable circuits are very reliable. They permit a change in line voltage within  $2-10$  volts and a three-fold change in the amplitude of the trigger signal. There is given a working circuit of a decade

SOV/86-59-1-6/39

AUTHOR: Panov, V.N., Col

TITLE: Maneuver of a Fighter-interceptor in the Final Stage of  
Guidance (Manevr istrebitelya-perekhivatchika na  
zaklyuchitel'nom etape navedeniya)

PERIODICAL: Vestnik vozdushnogo flota, 1959, Nr 1, pp 18-22 (USSR)

ABSTRACT: The article describes in detail the procedure for  
guiding a fighter-interceptor in the final stage of guidance. It  
is to be used by the ground controller and takes into considera-  
tion the maneuvering of the aircraft. There are two diagrams  
and two graphs.

Card 1/1



PANOV, V.O.; SMISHLYAYEV, L.M. [Smyshliaiev, L.M.]; BABADZHANOV, B.E.  
[Babadzhanov, E.E.]

Attachment for cleaning the spindles of spinning machine press  
rollers. Leh. from. no.2:35-36 Ap-Je'64 (MIRA 17:7)

PANOV, V.P., mekhanik-naladchik

How we improved the MRD-52 defectoscope. Put' i put.khoz. 8 i.o.3:  
34 '64. (MIRA 17:3)

1. Stantsiya Irkutsk II, Vostochno-Sibirskoy dorogi.

PANOV, V.P., dotsent

Simplified method for the X-ray determination of the depth of  
impaction of retained teeth. Trudy Nauch.-issl.inst.stom. no.10:  
129-133 '62. (MIRA 15:10)

(TEETH--RADIOGRAPHY)

BESSONOV, S.A.; VASIL'KOV, N.P., kand. ekon. nauk; VLASOV, V.A., kand. ekon. nauk; GLUKHAREV, L.I., kand. ekon. nauk; DANILEVICH, M.V., doktor ekon. nauk; ZHAMIN, V.A., doktor ekon. nauk, prof.; ZAKHMATOV, M.I., kand. ekon. nauk; KURAKIN, N.A., kand. ekon. nauk; PANOVA, V.P.; SMIRNOV, G.V., kand. ekon. nauk, dots.; TRIFONOV, V.I., kand. ekon. nauk; TYAGAY, Ye.Ya.; FAMINSKIY, I.P.; KHODOV, L.G.; SHMIDT, G.A., kand. ekon. nauk, dots.; SHMIGOL', N.N., kand. ekon. nauk, dots.; MATSUK, R.V., red.; GARINA, T.D., tekhn. red.

[The economy of foreign countries; the capitalistic system of the world economy after the Second World War] Ekonomika zarubezhnykh stran; kapitalisticheskaya sistema mirovogo khozyaystva posle Vtoroi Mirovoi voyny. Pod red. V.A.Zhamina. Moskva, Vysshaya shkola, 1962. 632 p. (MIRA 16:1)  
(Economic history)

L 28337-66 EWT(1)/EWT(m)/T/EWP(1)/ETI IJP(c) JD  
ACC NR. AP6013078 SOURCE CODE: UR/0048/86/030/004/0688/0870

AUTHOR: Bezels', V.S.; Gavrilov, F.F.; Panov, V.P.; Kraynyukov, N.I.

ORG: none

TITLE: Investigation of scintillation processes in ZnS:Ag single crystals /Report,  
fourteenth Conference on Luminescence held in Riga 16-23 September 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 668-670

TOPIC TAGS: scintillation, crystal phosphor, zinc sulfide, radioluminescence, stimulated emission, crystal decay, emission spectrum

ABSTRACT: Although in general the regularities evinced in radioluminescence of ZnS:Ag single crystals can be explained in the framework of the same energy band diagram as that invoked for interpreting the photo- and cathodoluminescences of this phosphor, the much higher excitation density in the case of radioluminescence gives rise to some distinctive effects. The present work, accordingly, was devoted to experimental investigation of the influence of the excitation density along the particle track on the thermostimulated emission (glow curves), decay time, emission spectrum and electroquenching. The specimens were relatively large ZnS:Ag (about  $3 \times 10^{-5}$  g/g Ag) single crystals grown from a melt. The excitation was produced by  $Pu^{239}$  and  $ThC-ThC'$  alpha particles, protons, deuterons, gamma rays and Hg ultraviolet. The glow curves (reproduced in a figure) were recorded after excitation with 2 MeV and 5 MeV alphas

Card 1/2

L 28337-66

ACC NR: AP6013078

and with UV. All three glow curves have peaks at  $-150^{\circ}$ , but only the glow curve obtained after UV excitation exhibits a broad peak located just below  $0^{\circ}\text{C}$ . The trap depth corresponding to the  $-150^{\circ}\text{C}$  peak is estimated as 0.25-0.28 eV. The persistence of the scintillation falls off with increasing excitation density along the track in agreement with the theoretical curve adduced by the authors. The intensity in the short wavelength part of the radioluminescence spectrum increases with increasing excitation density for all forms of excitation. Electroquenching (quenching by a dc field) was found to be analogous to temperature quenching. Orig. art. has: 2 figures.

SUB CODE: 20/

SUBM DATE: 00

ORIG REF: 004/

OTH REF: 001

Card 2/3 *CV*

I 09218-67 EWT(1) JM

ACC NR: AR6019902

SOURCE CODE: UR/0275/66/000/002/A025/A025

AUTHOR: Panov, V. P. 55

TITLE: Klystrons with a large cross sectional area for electron flow

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 2A168

REF SOURCE: Tr. Ryazansk. radiotekhn. in-ta, v. 5, 1962(1963), 1-10

TOPIC TAGS: klystron, electronic equipment, superhigh frequency, electronic measurement, electronic manufacturing machinery, electron flow

ABSTRACT: Some possible arrangements for designing klystron (K) structures with electron flows (EP) for large cross sections are reviewed. Superhigh frequency instruments with such EP can be used with particular success to obtain very high power, a broad amplification band, strong electron tuning, as well as in the millimeter and submillimeter bands, that is, in the bands where large EP current is needed, but where the maximum possible current density is limited. Methods of making K with large EP cross section, ribbon, radial, tubular, with several EP are analyzed. The features of a traveling wave K in which an EP with large cross section can be brought about are discussed. Bibliography of 17 titles. R. M.  
[Translation of abstract]

SUB CODE: 09

Cord 1/1 m

UDC: 621.385.623.4

ACC NR: AR6023695

SOURCE CODE: UR/0275/66/000/004/A001/A001

AUTHOR: Ovechkina, V. I.; Panov, V. P.; Poshekhonov, P. V.

TITLE: Investigation of the radiation factor of a sintered-oxide-coated-cathode sponge

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 4A5

REF SOURCE: Tr. Ryazansk. radiotekhn. in-ta, no. 5, 1962(1963), 55-59

TOPIC TAGS: oxide coated cathode, electron tube cathode, *cathode sponge*

ABSTRACT: The cathode sponges were investigated for the purposes of detecting the effect of sponge processing on its operating temperatures. The sponges made from various powders consisting of different-size grains were tested. Both the grain composition and the method of sponge application influence the cathode temperature. Zh.N. [Translation of abstract]

SUB CODE: 09

Card 1/1

UDC:621.385.735



L 43144-66 EWT(m)/T DS

ACC NR: AR6023696

SOURCE CODE: UR/0275/66/000/004/A011/A011

AUTHOR: Panov, V. P.; Balyabin, A. N.

ORG: none

TITLE: Apparatus for testing cathodes and shf generators in pulse operation

SOURCE: Ref zh. Elektronika i yeye primeneniye, Abs. 4A76

TOPIC TAGS: cathode, generator, pulse generator, testing device, shf generator

ABSTRACT: Basic data are provided for a device intended for testing cathodes and shf generators in pulse operation. L. L. [AM]

SUB CODE: 09, 10/

Card 1/1 MLP

PANOV, V.P.

Bunching in a cylindrical klystron with radially diverging  
electron beam. Izv. ~~TPI~~ 86:191-196 '58. (MIRA 13:5)  
(Klystrons)

FRANKENBERG, B.Ye., prof. (Odessa, Primorskiy bul'var, d.3/99); PANOV, V.P.,  
dotsent (Odessa, ul. Petra Velikogo, d.15, kv.3)

Hemangioma of the facial area of the cranium as shown in a  
radiogram. Vop.onk. 5 no.2:188-192 '59. (MIRA 12:6)

1. Iz chelyustno-litseyoy kliniki (zav. - prof. B.Ye.Franken-  
berg) i rentgenovskogo otdela (zav. - dotsent V.P.Panov),  
Odesskogo nauchno-issledovatel'skogo stomatologicheskogo  
instituta (dir. - starshiy nauchnyy sotrudnik M.N.Kukhareva).

(CRANIUM, neoplasms

angioma of facial cranium, x-ray features  
(Rus))

(ANGIOMA, manifest.

cranium, facial area, x-ray features (Rus))

FUNKE, V.F., kand.tekhn.nauk; IIDER, V.Ya., inzh.; PANOV, V.S., inzh.

Effect of tantalum on physicomechanical and cutting properties  
of tungsten carbide -cobalt alloys. Vest.mash. 42  
no.3:79-82 Mr '62. (MIRA 15:3)

(Tantalum)

(Cobalt alloys)

(Metal-cutting tools)

FUNKE, V.F.; YUDKOVSKIY, S.I.; PANOV, V.S.

Investigating the physical properties and the structure of alloys in  
the system TiC - WC - Co. Porosh. met. 2 no.6:61-66 N-D '62.  
(MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.  
(Ceramic metals—Testing)

FUNKE, V.F.; PANOV, V.S.

Effect of preparation conditions on the composition and properties  
of TiC-Wc-CO alloys. Porosh.met. 4 no.4:76 '79 JI-Ag '64. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh spлавov.

ACCESSION NR: AP4044913

S/0226/64/000/004/0076/0079

AUTHOR: Funke, V. F.; Panov, V. S.

TITLE: Effect of production conditions on the composition and properties of TiC-WC-Co alloys

SOURCE: Poroshkovaya metallurgiya, no. 4, 1964, 76-79

TOPIC TAGS: titanium alloy, tungsten alloy, titanium tungsten alloy, metal carbide, sintered alloy, powder metallurgy, cobalt impurity, vacuum sintering

ABSTRACT: There are few published papers on the effect of vacuum sintering on the properties of hard sintered alloys, such as metal carbides and titanium tungsten alloys, but it is well known that the properties of the carbides and alloys depend to a great extent on the carbon content. The experiments described in this paper show the effect of furnace rarefaction on the carbon content in solid solutions on a TiC base, as well as on the properties of a hard titanium tungsten alloy of the type T15K6. The alloys for the test were prepared in the usual way. The combined carbon content was 0.4-0.8% higher in the carbide produced in a vacuum than in that produced in hydrogen, but the quantity of free carbon was also higher. Variation in the degree of rarefaction influences the content of combined carbon only slightly. However, in the T15K6 alloy, variation in the vacuum changes the cobalt

Card 1/4

ACCESSION NR: AP4044913

content (Figs. 1 and 2 of the Enclosure). The sintering temperature is of even greater importance for the cobalt content than the degree of rarefaction. The strength of Ti5K6 alloy prepared in vacuo was also compared with samples sintered in hydrogen. These results confirmed that sintering of Ti5K6 alloys in a vacuum increases their strength on the cutting lathe and in bending tests. Orig. art. has: 3 tables and 2 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov  
(All-Union Scientific Research Institute of Hard Alloys)

SUBMITTED: 06May63

ENCL.: 02

SUB CODE: MM

NO REF 30V: 007

OTHER: 004

Cord 2/4



ACCESSION NR: AP4044913

ENCLOSURE: 01

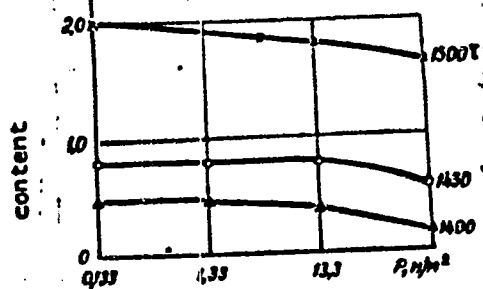


Fig. 1. Lowering of the cobalt content in T15K6 alloy in relation to the rarefaction in the furnace. Data given as averages of 3-5 sets. Ordinate = cobalt content in wt.%.

Card 3/4

L 26595-66 EWT(m)/EWP(e)/IWP(w)/ETC(f)/EWG(m)/T/EWP(t) IJP(c) JD/HW/JG/AT/

ACC NR: EP6013364 WE

SOURCE CODE: UR/0370/66/000/002/0120/0124

AUTHOR: Panov, V.S. (Moscow); Moyerson, G.A. (Moscow); Pinko, V.Y. (Moscow)

ORG: none

TITLE: Structure and physical and mechanical properties of WC-TaC-Co hard alloys

SOURCE: AN SSSR, Izvestiya. Metallurgy, no. 2, 1966, 120-124

TOPIC TAGS: metal cutting, tungsten carbide, tantalum compound, cutting tool, carbide abrasive, bend strength, toughness, hardness, cobalt alloy

# ABSTRACT:

The authors, in cooperation with the All-Union Scientific Research Institute of Hard Alloys (VNIITS), investigated the effect of composition, structure, and temperature on the bend strength, impact toughness, and hardness of a variety of WC-TaC-Co sintered carbides used in cutting tools for machining heat-resistant and other hard and tough materials.

It was found that alloys containing 2-90 mol% TaC (in respect to total WC+TaC) have a three-phase structure (WC, TaC, and Co), while those containing over 90 mol% TaC have a two-phase structure (TaC and Co).

Card 1/2

UDC: 669.017.13

L 26395-66

ACC NR: AP6013364

2

Additions of 2-5 mol% TaC increase considerably the hardness of sintered carbides at 20°C and the bending strength at 800°C, while the impact toughness and bend strength at 20°C remain about the same or decrease very slightly. However, a further increase in TaC content greatly lowers the bend strength of all sintered-carbide specimens.

An increase in cobalt content improves the bend strength at both 20°C and 800°C. It reaches a maximum at 800°C with 12-16 wt% cobalt, and at 20°C with 20 wt% cobalt.

As a result of the investigation, the following optimal composition of WC-TaC-Co sintered carbide is recommended for machining hard and tough metals and alloys: 2-5 mol% TaC (re total WC+TaC) and 6-12 wt% cobalt, depending on the machining conditions and the material to be machined.

Orig. art. has: 3 figures. [ATD PRESS: 4237-2]

SUB CODE: 20, 13, 11 / SUBM DATE: 28Sep64 / ORIG REF: 012 / OTH REF: 008

Card 2/2 - 610

1 63337-65 EWT(d)/EMP(a)/EWT(h)/EMP(w)/EPT(n)-2/EM(d)/EMP(r)/T/EMP(t)/  
 EMP(f)/EMP(h)/EMP(z)/EMP(b)/EMP(i) - Pt-h/Pu-h - 1.02(c) - JD/30  
 ACCESSION NR: P5017479 UR/0370/65/000/003/0176/0181  
 669:621-762 45  
 47B

AUTHOR: Meyerson, G. A.; Panov, V. S.

TITLE: Structure and physicomachanical properties of alloys of the WC-NbC-Co type

SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1964, 176-181

TOPIC TAGS: hard alloy, niobium containing alloy, tantalum containing alloy, tool material, niobium carbide, bending strength, impact toughness, powdered metal alloy, hardness

ABSTRACT: Powdered-metal hard alloys are the best of all tool materials used to cut heat resistant metals and alloys which are difficult to machine. Considering the similarity of the properties and structure of the carbides of tantalum and niobium, it may be assumed that the addition of niobium carbide is as effective as that of tantalum carbide in improving the physicomachanical properties (increasing wear resistance without detriment to strength and impact toughness) of hard alloys

Card 1/3

L 63337-65

ACCESSION NR: AP5017479

was determined by metallographic and X-ray methods. It was found that within the limits of the three-phase region (WC, NbC-WC, Co) the properties of the alloys change linearly with composition (given the same grain size of carbide phases) and are determined by the volumetric ratio between the phases. Within the limits of the two-phase region (NbC-WC, Co) the change in properties is a function of the concentration of tungsten carbide in the carbide solid solution, which leads to a deviation from the linear dependence. The addition of 2.19 mol. % NbC in relation

Card 2/3

U 63337-65

ACCESSION NR: AP5017479

ty as tool materials. Orig. art. has: 3 figures, 1 table.

ASSOCIATION: none

SUBMITTED: 01Dec64

ENCL: 00

SUB CODE: MM, SS

NR REF SOV: 006

OTHER: 008

Cutting tools

14

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239110003-1"

Card 3/3

FUNKE, V.F.; TUMANOV, V.I.; PANOV, V.S.

Structure and physical properties of Wc-TaC-Co and Wc-NbC-Co alloys. Fiz. met. i metalloved. 19 no.6:858-862 Je '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.

15258

S/226/62/000/006/009/016  
E193/E383

18.1157  
AUTHORS:

Funke, V.F., Yudkovskiy, S.I. and Panov, V.S.

TITLE:

A study of the structure and physical properties of alloys of the TiC-WC-Co system

PERIODICAL:

Poroshkovaya metallurgiya, no. 6, 1962, 61 - 66

TEXT:

The effect of the Co content and heat-treatment on the structure and properties of three series of WC-base alloys was studied. The W content of each series varied between 0 and 30%; alloys of the first series contained WC only, those of the second and third series containing 16 and 64% TiC, respectively. Conventional methods were used for the preparation of experimental specimens, hot pressing being used in the preparation of Co-free compacts. The specimens were free from pores and did not contain structurally-free carbon. X-ray diffraction analysis and measurements of hardness and electrical resistance were conducted on specimens a) as sintered, b) annealed for 2 h at 1200 °C and furnace-cooled to room temperature and c) oil-quenched from 1200 °C after 2-h holding at the temperature. X-ray diffraction analysis has shown that the carbide phase in the WC-Co alloys is under

Card 1/3



A study of ....

S/226/62/000/006/009/016  
E193/E383

compressive stresses, whereas TiC in the ternary alloys containing structurally-free WC is under tensile stresses. Other results are reproduced graphically in Fig. 1; the electrical resistivity ( $\rho$ ,  $\Omega$  cm) is plotted against the Co content (vol. %) in WC-Co alloys (bottom graph) and ternary alloys with 16 and 64% TiC (Ti5 and T60, respectively, top graph); the curves marked '3 aka/ka', 'чеканка' and 'омкн' relate, respectively, to quenched, sintered and annealed specimens. In Fig. 2, the bending strength ( $\sigma_{\text{изл}}$ , kg/mm<sup>2</sup> - continuous curves) and Vickers hardness ( $H_v$ , kg/mm<sup>2</sup> - broken curves) are plotted against the Co content (vol. %) in sintered alloys, containing no titanium carbide (BK) or with a titanium carbide of 16 and 64% (curves Ti5 and T60, respectively). There are 2 figures and 1 table.

ASSOCIATION:

Vsesoyuznyy nauchno-issledovatel'skiy institut  
tverdykh splavov (All-Union Scientific Research  
Institute of Hard Alloys)

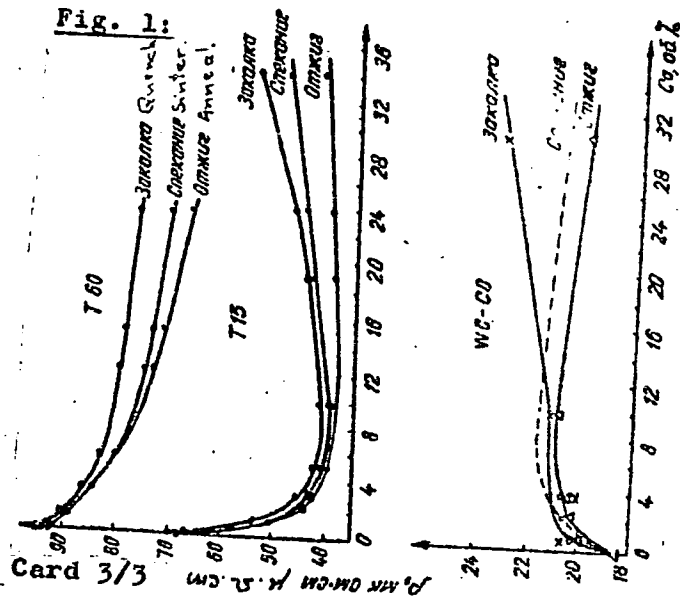
SUBMITTED:

April 14, 1962

Card 2/3.

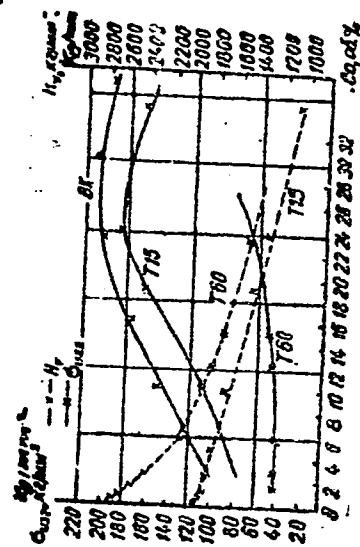
A study of ....

Fig. 1:



8/226/62/000/006/009/016  
E193/E383

Fig. 2:



15 2240

3053

S/126/61/012/003/008/021  
E073/E535

AUTHORS: Funke, V.F., Panov, V.S. and Yudkovskiy, S.I.

TITLE: Structure and the physical and mechanical properties of  
TiC-WC-Co carbides

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol.12, No.3,  
pp.382-388

TEXT: The results are given of investigations of the structure of TiC-WC-Co carbides and of their properties as a function of the composition and heat treatment. Two series of carbides with cobalt contents between 0 and 30 wt.% and a constant content of the carbide phase in each of the series were investigated. (Yu. A. Skudin and K. F. Kuznetsova participated in the experiments). In the first series the content of titanium carbide was about 16%, in the second about 64% of the carbide phase. In the first case the carbide phase consisted of structurally free tungsten carbide and a saturated solution of WC and TiC; in the second, the carbide phase consisted of a solid solution of WC and TiC. The carbides were prepared by current methods; carbides with up to 1% Co were produced by hot pressing. The sintered specimens did not have any

Card 1/54

30453

Structure and the physical ...

S/126/61/012/003/008/021  
E073/E535

titanium phase will be subjected to tensile stresses. Fig.1 shows a plot of the specific electric resistance,  $\rho$ ,  $\mu\text{ohm}\cdot\text{cm}$ , of Ti-WC-Co carbides as a function of the cobalt content (wt.%). Two sets of materials were used with the following heat treatments: TiC/WC = 1.765: 1 - sintered; 2 - annealed; 3 - quenched. TiC/WC = 0.19: 4 - sintered; 5 - quenched, 6 - annealed. A sharp drop in the electric resistance caused by an increase of the Co content from 0 to 4% is attributed to the relief of the thermal stresses of the carbide phase as a result of increasing the content of the ductile component, which leads to a stress relaxation and to a reduction of the concentration of tungsten carbide in the solid solution TiC-WC on increasing the cobalt content from 0 to 1%. An increase in the electric resistance for carbides containing over 4% Co is attributed to the fact that the specific electric resistance of the carbide phase is lower than that of the bonding phase and, consequently, an increase in the quantity of the latter is accompanied by an increase of the electric resistance of the carbide as a whole. Data on the dependence of the bending strength,  $\sigma$ ,  $\text{kg/mm}^2$ , on the composition,

Card 3/5/

30453

Structure and the physical ...

S/126/61/012/003/008/021  
EO73/E535

Co, vol.%, are plotted in Fig.3 (1 - tungsten-cobalt carbides, 2 - titanium-tungsten-cobalt carbides ( $TiC/WC = 0.19$ ), 3 - titanium-tungsten-cobalt carbides ( $TiC/WC = 1.765$ )). Fig.4 is a plot of the dependence of the hardness, HV,  $kg/mm^2$  on the cobalt content, wt.% (1 -  $TiC/WC = 1.765$ ; 2 -  $TiC/WC = 0.19$ ;  $\Delta$  - sintered, X - annealed, O - quenched). It can be seen that for both two-phase and three-phase WC-TiC-Co carbides the hardness increases almost linearly with increasing cobalt content and is almost independent of the heat treatment and the composition of the bonding phase. There are 4 figures and 12 references: 6 Soviet and 6 non-Soviet. The English-language references read as follows: Ref.2: Gurland, I., Norton, I., J.Metals, 1952, 4, No.10, 1054; Ref.11: Gangler, I., J. Am.Cer.Soc., 1950, 33, 367. X

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov (All Union Scientific-Research Institute for Carbides)

SUBMITTED: November 28, 1960 (initially)  
May 25, 1961 (after revision)

Card 4/5

35032

S/122/62/000/003/006/007

D262/D302

18.1152

AUTHORS: Funke, V.F., Candidate of Technical Sciences, Lider, v.Ya., and Panov, V.S. Engineers

TITLE: Effect of tantalum on physical, mechanical and cutting properties of tungsten-cobalt carbide alloys

PERIODICAL: Vestnik mashinostroyeniya, no. 3, 1962, 79 - 82

TEXT: Experiments conducted to establish the effect of small quantities of tantalum and titanium (up to 3 atomic percent), on WC-Co alloys containing 8 % Co, are described. The alloying elements were introduced in the form of single-phase solid solutions TaC-WC and TiC-WC. The alloys obtained had the same grain size of the WC phase for all contents of the alloying element. The specimens were subjected to the following tests and the results were recorded in form of graphs and analyzed. 1) Bending (machine  $\bar{\pi}$ -5 (R-5), at 20°C, distance between supports 30 mm); addition of Ta had practically no effect on the bending resistance; addition of Ti lowered the resistance; 2) Impact (pendulum hammer, 50 kg/cm, at 20°C, distance between supports 30 mm).  
Card 1/2

Effect of tantalum on physical, ...

S/122/62/000/003/006/007  
D262/D302

ween supports 20 mm); Impact strength increased slightly with increasing Ta content; 3) Hardness (diamond indenter load 10 kg) increased linearly with increasing Ta content; 4) Cutting properties (machined material: Cast iron and carbon steel); with the increase of the Ta content wear qualities improve. The effect of the Ti is similar but less pronounced. There are 5 figures, 1 table and 11 references: 7 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English-language publication reads as follows: M. Petrdlik, Research Institute for Powder Metallurgy. An abridged version of a paper read at the International Conference on Sintered Carbides held at Strbske Pleso (High Tatra) in December 1958.

X

Card 2/2

ACCESSION NR: AP5016S28

UR/0126/65/019/006/0828/0862

546.261

43  
B

AUTHOR: Fuhke, V. F.; Tumanov, V. I.; Panov, V. S.

TITLE: Structure and physical properties of WC-TaC-Co and WC-NbC-Co alloys

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 6, 1965, 858-862

TOPIC TAGS: physical metallurgy, mechanical property, powder metallurgy, carbide phase, alloy constitutional diagram, chemical analysis

ABSTRACT: Experimental data are given for the basic physical properties of WC-TaC-Co and WC-NbC-Co alloys and the relationship of these to the composition and structure is shown. X-ray, metallography, and electrochemical tests were done on the above systems for Co compositions ranging from 7 to 25 wt% with varying ratios of TaC(NbC):WC. The alloys were made by powder metallurgy, and a ternary diagram shows the solubility of WC in TaC(NbC) at 1500°C. X-ray and chemical methods were used to determine the solubility of TaC(NbC) in Co. Only 0.3 wt% TaC could be dissolved in Co, compared to 3.5 wt% NbC. Such physical properties as coefficient

Card 1/2



60139-65

ACCESSION NR: AP5016528

of linear expansion ( $\alpha$ ), Young's modulus ( $E$ ), Vickers hardness ( $HV$ ), and electrical resistivity ( $\rho$ ) are tabulated for the separate phases: WC, NbC, TaC and Co. The effects on these properties of adding TaC(NbC) to the 7 and 25 wt% Co mixture are presented graphically. An anomalous change in the properties of the alloys for increasing contents of TaC(NbC) occur at about 10 mol% and an explanation of this effect is given, based on the change in composition of the binding phase and the character of its distribution. Orig. art. has: 4 figures, 2 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov (All-Union Scientific-Research Institute of Hard Alloys)

SUBMITTED: 310 and 4

ENCL: 00

SUB CODE: MM

NO REF SOV: 006

OTHER: 000

Card 2/2

ACC NR: AP6036449

SOURCE CODE: UR/0370/66/000/006/0146/0153

AUTHOR: Funke, V. F. (Moscow); Panov, V. S. (Moscow)

ORG: none

TITLE: Structure and properties of solid solutions of tungsten carbide in titanium carbide, niobium carbide, and tantalum carbide

SOURCE: AN SSSR. Izvestiya. Metally, no. 6, 1966, 146-153

TOPIC TAGS: solid solution, crystal lattice, tungsten carbide, titanium carbide, niobium carbide, tantalum carbide, elastic deformation, ~~carbide~~ *carbide*, *titanium compound*, *niobium compound*, *tantalum compound*

ABSTRACT: A study of the structure and properties of solid solutions of tungsten carbide in titanium carbide, niobium carbide, and tantalum carbide showed that an increase in the concentration of tungsten carbide is accompanied by an increase in hardness and specific electrical resistance and a decrease in the angle of contact of wetting by nickel. The greater the difference between WC and the carbide solvent in free energy and the enthalpy of carbide formation and the atomic number of the carbide metal, the greater the solubility (critical concentration) and changes in the

Card 1/2

UDC: 669.621.762

ACC NR: AP6036449

properties of the solid solutions (increase in  $H_v$  and  $\rho$ , and decrease in  $\theta$ ). The experiments also showed that the energy of elastic deformation in the crystalline lattice of the carbide solvent increases upon dissolution. Orig. art. has: 3 tables and 2 figures. [Based on authors' abstract]

[SP]

SUB CODE: 11/ SUBM DATE: 18Feb85/ORIG REF: 009/OTH REF: 001/

Card 2/2

NIKOLAYEVSKIY, Georgiy Konstantinovich; PANOV, Vladimir Stepanovich;  
TOMAREVSKAYA, Yevgeniya Stepanovna; SITNIKOV, Vladimir  
Stepanovich; CHETVERUKHIN, N.F.; LEVITSKIY, V.S.;  
PRYANISHNIKOVA, Z.I.; TEVLIN, A.M.; FEDOTOV, G.I.;  
DMITRENKO, Ye.P., otv. red.; KURILOVA, T.M., red.;  
NESTERENKO, A.S., red.; ALEKSANDROVA, G.P., tekhn.red.

[Required practice work in descriptive geometry] Obiaza-  
tel'nyi praktikum po nachertatel'noi geometrii. Khar'kov,  
Khar'kovskii gos.univ., 1963. 122 p. (MIRA 17:1)

PANOV, V.V., Cand Geol-Min Sci -- (diss) "Geological structure and prospects of petroleum gas production in the Verkhoyanskiy Region leading flexure." Novosibirsk, 1960. 30 pp; (Siberian Division of the Academy of Sciences USSR, Inst of Geology and Geophysics); 200 copies; price not given; list of author's work on pp 28-30; (KL, 27-60, 150)

PANOV, V.V.

Stratigraphy of Mesozoic sediments in the western slope of the  
Verkhoyansk Range in the Sobopol-Kyundyndev interfluvium.  
Mat.po geol.i pol.isko).IAk. ASSR no.2: 67-73 '60. (MIRA 15:10)

(Verkhoyansk Range—Geology, Stratigraphic)

NAMETKIN, N.S., otv. red.; PANOV, V.V., kand. tekhn. nauk, otv.  
red.; MIYESSEROV, K.G., red.

[Synthesis and properties of monomers] Sintez i svoistva  
monometrov. Moskva, Nauka, 1964. 300 p. (MIRA 17:10)

1. Akademiya nauk SSSR. Institut neftekhimicheskogo sin-  
teza. 2. Chlen-korrespondent AN SSSR (for Nametkin).

PANOV, V. V.

PA 30T61

**Oils - Viscosity**  
**Viscosity**

**Oct 1947**

**"The Relationship of Viscosity of Oils to Their Chemical Composition," V. V. Panov, 5 pp**

**"Neftyanoye Khozyaystvo" No 10**

Discussion of experiments on the viscosity of various types of oils under different temperatures, as related to their chemical composition. The article is accompanied by tables of data on the experiments.

10

30T61



PANOV, V.V.

All-Union conference on the study of petroleum and petroleum  
products' composition. Khim.i tekhn.topl.no.2:68-72 F '56.  
(Petroleum products) (MIRA 9:9)

PANOV, V. V.

USSR/Chemical Technology. Chemical Products and Their I-14  
Application--Treatment of natural gases and  
petroleum. Motor fuels. Lubricants

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 9272

Author : Kusakov, M. M. and Panov, V. V.

Inst : Academy of Sciences USSR

Title : Study of the Composition of Petroleum and Petro-  
leum Products and Methods for its Determination  
(All-Union Conference)

Orig Pub: Vestn AN SSSR, 1956, No 6, 130-133

Abstract: A survey of the reports and transactions of the  
All-Union Conference convened by the Academy of  
Sciences USSR and the Ministry of Petroleum  
Industry held in Moscow on 16-20 January 1956.  
The conference dealt with the study of the com-  
position and properties of petroleum, light  
petroleum products, lubricating oils, and the  
high-polymer constituents of petroleum as well as

Card 1/2

PHASE I BOOK EXPLOITATION 963

Panov, Vladimir Vladimirovich and Sobolev, Yuriy Sergeyevich

Smazochnyye masla dlya aviatsionnykh gazoturbinnnykh dvigateley (Lubricants For Aircraft Turbine Engines) Moscow, Gostoptekhnizdat, 1958. 94 p. 4,000 copies printed.

Ed.: Yeffimova, T.D.; Tech. Ed.: Solomonidin, S.M.

**PURPOSE:** This book is intended for scientists, engineers, and technicians participating in the study, testing, manufacture, and application of lube oils for aircraft gas turbine engines.

**COVERAGE:** The authors review the achievements in the field of gas turbine lubrication. They discuss physicochemical properties of the basic types of petroleum and synthetic oils and consider current trends in the search for high grade oils for gas turbine engines. An analysis is made of the application of lubricating oils, their requirements, their performance, and changes which occur in them due to working conditions. The authors thank E.I. Frankenshteyn, B.D. Zaloga, and L.I. Saranchuk for advice and critical comments. Chapters 1 and 2 of this book were written by Yu.S. Sobolev, and Chapters 3, 4, and 5 by V.V. Panov. There are 31 tables, 27 figures, and 73 references of which 46 are Soviet, 26 English,

Card 1/3

Ch. 3. Petroleum Oils

Specifications for oils 27

Card 2/3

30

|                                                  |     |
|--------------------------------------------------|-----|
| Lubricants For Aircraft Turbine (Cont.)          | 963 |
| Ch. 4. Synthetic Lubricating Oils                |     |
| Lubricating oils based on aliphatic esters       | 44  |
| Properties of aliphatic esters                   | 46  |
| Application of esters as lubricants              | 49  |
| Polyalkylene glycol oils                         | 58  |
| Oils based on silicon organic compounds          | 67  |
| Silicic acid esters                              | 73  |
| Organophosphoric and halide compounds            | 78  |
|                                                  | 80  |
| Ch. 5. Oil Testing Methods                       |     |
| Oxidation stability of oils at high temperatures | 82  |
| Wear-resistance properties                       | 82  |
| Foaming of oils                                  | 88  |
| Determining the volatility of oils               | 90  |
|                                                  | 92  |
| Bibliography                                     |     |
|                                                  | 93  |
| AVAILABLE: Library of Congress                   |     |
|                                                  | 93  |
| Card 3/3                                         |     |

TM/fal  
1-7-59

OBOLONTSEV, R.D., doktor khim.nauk, red.; GAL'PERN, G.D., doktor.khim.nauk, red.;  
CHERTKOV, Ya.B., doktor tekhn.nauk, red.; ~~MANOV, V.I.,~~ kand.tekhn.nauk,  
red.; ROZHDESTVENSKIY, V.P., kand.khim.nauk, red.; BRUSOV, I.I., red.  
izd-va; POLENOVA, T.P., tekhn.red.

[Chemistry of sulfur organic compounds in petroleum and petroleum products] Khimiia sereorganicheskikh soedinenii, sodershashchikhsia v neftiakh i nefteproduktakh. Moskva, 1959. 376 p. (MIRA 12:2)

1. Akademiya nauk SSSR, Bashkirekiy filial, Ufa. 2. Bashkirekiy filial AN SSSR, Otdel khimii (for Obolontsev). 3. Institut nefti AN SSSR (for Gal'pern). 4. Nauchno-issledovatel'skiy inst. goryucho-smesochnykh materialov (for Chertkov).

(Sulfur organic compounds)

PANOV, V. V., PAPOK, K. K., PUCHKOV, N. G., KROYN, S. I., SEMENID, E. G.

"Investigation of Motor Oil Stability and Methods of Its Evaluation."

Report submitted at the Fifth World Petroleum Congress, 30 May -  
5 June 1959. New York.

NAMETKIN, N.S.; PANOV, V.V., kand.tekhn.nauk

Sixth World Petroleum Congress. Vest. AN SSSR 34 no. 2:79-81  
F '64. (MIRA 17:5)

1. Chlen-korrespondent AN SSSR (for Nametkin).

FEDYNSKIY, V.V., doktor fiziko-matem. nauk, red.; LEVINSON, V.G., kand.  
geol.-mineral. nauk, red.; TOPCHIEV, A.V., akad. NAGIYEV, M.F.,  
akad., red.; SHUYKIN, N.I., red.; MIRCHINK, M.F., red.; TREBIN, F.A.,  
doktor tekhn. nauk, red.; SANIN, P.I., doktor khim. nauk; SUKHANOV,  
V.P., inzh., red.; PANOV, V.V., kand. tekhn. nauk, red.; IONEL', A.G.,  
vedushchiy red.; ZARETSKAYA, A.I., vedushchiy red.; FEDOTOVA, I.G.,  
tekhn. red.

[Reports of the International Petroleum Congress. 5th New York, 1959]  
Doklady V Mezhdunarodnogo neftianogo kongressa, New York, 1959. Mo-  
skva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry.  
Vol.1. [Geology and geophysics] Geologiya i geofizika. Pod red. V.V.  
Fedynskogo i V.G.Levinsona. 1961. 382 p. (MIRA 14:9)

1. International Petroleum Congress. 5th, New York, 1959. 2. AN Azer-  
baydzhanskoy SSR (for Nagiyev). 3. Chleny-korrespondenty AN SSSR (for  
Shuykin, Mirchink).

(Petroleum geology) (Gas, Natural—Geology)  
(Prospecting—Geophysical methods)



NAMETKIN, N.S.; PANOV, V.V.

Production of monomers. Vest.AN SSSR 32 no.7:116-117 J1 '62.  
(MIRA 15:7)

1. Chlen-korrespondent Akademii nauk SSSR (for Nametkin).  
(Petroleum chemicals)

L 27231-66 EWP(J)/EWI(m)/T RM/DJ

ACC NR. AM6003011

Monograph

26 UR/  
25

Panov, Vladimir Vladimirovich; Papok, Konstantin Karlovich

B+1

Lubricating oils in modern technology (Smazochnyye masla sovremennoy tekhniki) Moscow, Izd-vo "Nauka," 1965. 128 p. illus., biblio. 11,000 copies printed. Series note: Akademiya nauk SSSR. Nauchno-populyarnaya seriya

TOPIC TAGS: lubricating oil, petroleum base oil, synthetic oil

PURPOSE AND COVERAGE: This popular booklet provides basic information on the composition and properties of present-day petroleum-base and synthetic lubricants, mostly oils, and on their applications. Polyphenyl oils are discussed on pp 88-93 of the source in general terms. Synthesis, chemical and physicochemical properties, thermal and thermal-oxidative stability, and lubricity are touched on. It is stated that: "Polyphenyl oils have not yet found wide application, because polyphenyl ethers have not been studied thoroughly. Polyphenyl oils are considered as promising lubricants for service at high temperature, e.g., in high-performance supersonic jet engines. Polyphenyl oils are beginning to find application as heat-and-radiation-resistant hydraulic fluids."

There are no references and only a short, 12-item bibliography.

TABLE OF CONTENTS (Abridged):

Card 1/3

L 27231-66

ACC NR: AM6003011

Introduction — 3

History of lubricating oils — 9

Requirements for lubricating oils — 15

Petroleum-base oils — 28

Synthetic hydrocarbon oils — 59

Diesel oils — 63

Neopentyl oils — 77

Polyglycol oils — 80

Polyphenyl oils and fluids — 88

Siloxane oils, fluids and lubricants — 93

Orthosilicate oils and fluids — 108

Fluorine- and chlorine-containing oils — 111

Card 2/3

1 27231-66

ACC NR: AM6003011

Organophosphorus oils and fluids — 120

Continuing search for new lubricating materials — 124

Recommended literature — 130

SUB CODE: 11/ SUBM DATE: 31Aug65/ ORIG REF: 012/

Card

3/3

cc

PANOV, V.V.

Intensity of turbulent heat conduction in waters of the Kara Sea.  
Probl.Arkt.i Antarkt. no.5:21-25 '60. (MIRA 14:4)

(Kara Sea—Ocean temperature)

GORDIYENKO, P.A.; PANOV, V.V.

In the Section of the Arctic Ocean. Okeanologiya 1 no.4:761-762  
'61. (MIRA 14:11)

(Arctic regions--Oceanographic research)

PANOV, V.V.

Determining the coefficient of horizontal turbulent exchange in the  
Kara Sea. Trudy AANII 210:185-192 '61. (MIRA 14:11)  
(Kara Sea--Hydrology)

PANOV, V.V.

Practice of determining the parameter of roughness of the surface of the sea and the coefficient of turbulent heat exchange above the surface of the water. Trudy AANII 256:78-81 '61.

(MIRA 15:8)

(Oceanography)



PANOV, V.V.

Role of Atlantic waters in the hydrological and ice conditions of  
Arctic seas (exemplified by the Kara Sea). Probl. Arkt. i Antarkt.  
no.8:75-77 '61. (MIRA 15:3)

(Kara Sea--Temperature)

TIMOFEYEV, Vladimir Timofeyevich; PANOV, Vladimir Vasil'yevich;  
SHPAYKHER, A.O., otv. red.; NEDOSHIVINA, T.G., red.;  
ALEKSEYEV, A.G., tekhn.red.

[Indirect methods for the separation and analysis of water  
masses] Kosvennye metody vydeleniia i analiza vodnykh mass.  
Leningrad, Gidrometeoizdat, 1962. 350 p. (MIRA 15:12)  
(Hydrology)

PANOV, V.V.; SHPAYKHER, A.O.

New objectives of oceanographic research in Arctic seas. Probl.  
Arkt. i Antarkt. no.10:11-15 '62. (MIRA 16:2)  
(Arctic regions—Oceanographic research)

PANOV, V.V.; SHPAYKHER, A.O.

Effect of the Atlantic Ocean waters on some characteristics  
of hydrological conditions in the Arctic Basin and adjacent  
seas. Okeanologiya 3 no.4:579-590 '63. (MIRA 16:11)

PANOV, V.V.; SHPAYKHER, A.O.

Role of Atlantic waters in the formation of the hydro-  
meteorological regime in the Arctic seas. Trudy AANII  
264:10-14 '63. (MIRA 17:6)

PANOV, V.V.

Some characteristics of large-scale horizontal turbulence  
in the waters of the Arctic Ocean. Trudy AANII 264:61-66  
'63. (MIRA 17:6)

PANOV, V.V.

Methods for forecasting the salinity of the surface  
layer water in the Kara Sea. Trudy AANII 264:15-17  
'63. (MIRA 17:6)

PANOV, V.V.

Analysis of temperature formation in the active layer of the sea in the southwestern part of the Kara Sea by the method of approximate calculation. Trudy AANII 248:8-24 '03. (MIRA 17:6)



GRATSIANSKIY, V.P., prof.; PANOY, V.Ie., zasluzhennyy vrach

Some characteristics of the course and therapy of giant-cell tumors  
(osteoblastoclastomas). Ortop., travm. i protez. 20 no.11:62-67 N '59.  
(MIRA 13:4)

1. Iz kafedry rentgenologii i radiologii Kalininskogo meditsinskogo  
instituta i Kalininskogo onkologicheskogo dispansera.  
(GIANT CELL TUMORS)

PANOVA, V.Ye.; NASYROVA, M.D.

Radiometric determination of lead with the aid of  $\text{Cr}^{51}$ . Izv.vys.  
ucheb.zav.;khim.i khim.tekh. 5 no.3:371-373 '62. (MIRA 15:7)

1. Ivanovskiy khimiko-tehnologicheskoy institut, kafedra  
analiticheskoy khimii.  
(Lead--Analysis) (Chromium--Isotopes)

PANOVA, V. Ye.

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1. Ivanovskiy khimiko-tehnologicheskii institut.  
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Improve the organization of equipment repairs. Tekst. prom. 19 no.7:  
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1. Glavnyy mekhanik Barnaul'skogo melanzhevo-ro kombinata.  
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Modernized "BSh" drier for dyed cotton. Tekst.prom. 16 no.5:43-44  
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(Drying apparatus--Textile fabrics)

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Preflight attitude. Grazhd.av. 12 no.2:34-35 P '55. (MIRA 16:1)

1. Nachal'nik upravleniye lechebno-sanitarnykh uchrezhdeniy  
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(Air pilots)

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Hunting without a gun. Sov.foto 20 no.9:41-43 S '60. (MIRA 13:9)  
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DULIN, V.A.; MASHKOVICH, V.P.; PANOV, Ye.A.; TSYPIN, S.G.

Energy distribution of fast fission neutrons in water. Atom.energ.  
9 no.4:318-319 0 '50. (MIRA 13:9)  
(Neutrons)

L 05065-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JR/GD/JH

ACC NR: AT6027937

SOURCE CODE: UR/0000/66/000/000/0198/0201

AUTHOR: Yegorov, Yu. A.; Panov, Ye. A.

ORG: None

TITLE: Experiments with plane slits of various configuration in radiation shielding

SOURCE: Voprosy fiziki zashchity reaktorov (Problems in physics of reactor shielding); sbornik statey, no. 2. Moscow, Atomizdat, 1966, 198-201

TOPIC TAGS: radiation shielding, lead, radiation source, radioisotope, cobalt, gamma radiation

ABSTRACT: The authors give comparative experimental data for the passage of radiation through plane slits of various shapes in the shielding of reactors and radiation sources. The results are compared with respect to the measured distribution of dose rate behind shielding with an air slit and a slit filled with aluminum. An isotropic Co<sup>60</sup> source in the form of a plate measuring 250×250 mm was used in the experiment and the resultant γ-radiation was recorded by a scintillation gamma dosimeter located 40 mm from the shielding. The shielding studied was made up of lead units 90 mm thick with lateral dimensions of approximately 200 and 450 mm. Additional shielding around the source and the pickup was used to eliminate the effect of γ-radiation scattered from surrounding objects. Flat and staggered slits were studied as well as a combination

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of the two configurations. The experimental results show that the integral increase in dose rate for the combination slit is equal within 20% to the sum of the relative dose rate (the ratio of the dose rate behind shielding with a slit to that behind the solid shield) for the plane and staggered slits. It is also shown that combinations of two staggered and one plane slit or two staggered slits give an increase in dose rate equal to the sum of the simple configurations. Orig. art. has: 2 figures, 1 table.

SUB CODE: 18/ SUBM DATE: 12Jan66/ ORIG REF: 001

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2/2 *pls*

DULIN, V.A.; KAZANSKIY, Yu.A.; KASHKOVICH, V.P.; PANOV, Ye.A.;  
TSYPIN, S.G.

Attenuation functions of neutrons from isotropic and highly  
collimated fission sources in water. Atom.energ. 9 no.4:  
315-317 0 '60. (MIRA 13:9)  
(Neutrons)